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Re: Prevalence of Pulmonary Embolism in ED patients with Suspected COVID-19: The Truth Remains Unknown.

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Dear editor,

We thank « John Doe » et al. for their interest and comments on our paper “Association between Pulmonary Embolism and COVID-19 in ED patients: the PEPCOV international retrospective study”.[1,2]

The authors raised the important issue of a possible bias, because we only analyzed patients that were tested for pulmonary embolism (PE) with computed tomography pulmonary angiogram (CTPA). We acknowledge that this is a limitation, and accordingly highlighted in our manuscript that whether these results apply to the general population is unknown. We believe that adding exhaustive data on patient volume or characteristic of the “non-tested” group would be dangerously misleading: the characteristic and volume of patients that visited the ED during the pandemic period are very peculiar, as has been widely described, and would not have helped us to evaluate the magnitude of this bias.

Secondly, an issue was raised on whether the study week may have been a significant confounder. As reported in our manuscript, when adding the variable “week of study” in the model, there was no significant effect, neither in univariate analysis nor in bivariate (Odds Ratio [OR] 1.00, 95% confidence interval [CI] 0.97 to 1.03, and adjusted OR 1.02 [95%CI 0.99 to 1.06] respectively). To ascertain that the study week had no effect, we analyzed this variable when limited to the pandemic period, and confirmed that there was no significant effect of study week (OR 0.98 [95% CI 0.87 to 1.10] and adjusted OR 1.09 [0.96 to 1.25] respectively).

As we acknowledged in our manuscript, we cannot exclude a biased estimate of PE prevalence in our study due to increased awareness of COVID-19 associated coagulopathy. However, we believe that this bias is of limited magnitude because the analysis limited to the pandemic period, and adjusted for the study week, confirmed our results. Furthermore, patients were included in our study until April 10th, which was at a time up to which there were few reports of such coagulopathy.

References

1. Prevalence of Pulmonary Embolism in ED patients with Suspected COVID-19: The Truth Remains Unknown.

2. Freund Y, Drogrey M, Miró Ò, et al. Association Between Pulmonary Embolism and COVID-19 in Emergency Department Patients Undergoing Computed Tomography Pulmonary Angiogram: The PEPCOV International Retrospective Study. *Academic Emergency Medicine*. n/a(n/a). doi:10.1111/acem.14096